



# INSTALLATION GUIDE

# BPC DECKING

www.uk.eva-last.com





# INSTALLATION GUIDE

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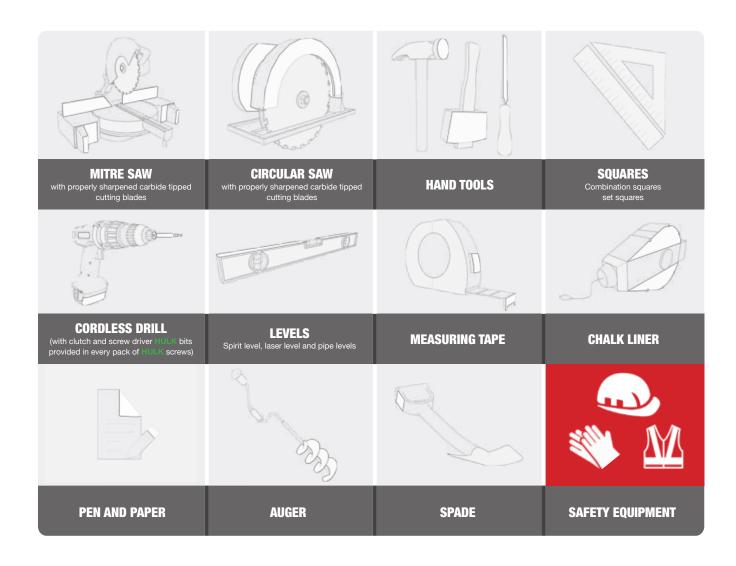
Thank you for choosing Eva-Last<sup>®</sup> Infinity<sup>™</sup> decking. You can be assured that you are installing a co-extruded bamboo-composite product that is one of the most durable, highest performing and long lasting in its class.

This installation guide was developed to help limit installation faults and workmanship, and to help you complete decking installations that last and conform to warranty specifications. Before beginning installation, please make sure you have registered your product online and that you have read and are familiar with all our warranty terms & conditions, available at www.uk.eva-last.com

### 2. Tools & Materials

### 2.1 Tools

Eva-Last<sup>®</sup> Infinity<sup>TM</sup> decking requires the same tools as those used for the installation of traditional timber decks. In order to properly install an Eva-Last<sup>®</sup> Infinity<sup>TM</sup> deck, you will need the following tools:



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#### 2.2 Materials

In order to properly install an Eva-Last<sup>®</sup> Infinity<sup>TM</sup> deck you will need the following materials:

- □ Eva-Last<sup>®</sup> Infinity<sup>™</sup> decking boards
- □ Eva-Last<sup>®</sup> Infinity<sup>™</sup> fascia boards
- Clips
- Clip screws
- Composite Deck Screw
- Beams to support the deckingPoles
- Cement/concrete
- String/line
- Marker boards
- 3. Eva-Last<sup>®</sup> Specialised Systems

Eva-Last<sup>®</sup> has developed a range of complete and durable specialised systems that work together with Eva-Last<sup>®</sup> *Infinity*<sup>™</sup> boards to ensure longevity and stability of the deck.

### 3.1 HULK Screws



Eva-Last<sup>®</sup> exclusively recommends HULK screws to provide the strongest and most durable fix for both wood and steel. HULK screws are specially coated and designed to fasten clips to a substructure, but can be used in many other wood or steel fixing applications too. HULK screws are nano-coated with zinc-epoxy corrosion resistant HCTO nano-coating and have been tested and developed under some of the heaviest loads and in the most ruthless of conditions. They use an advanced bit lock system which maximises torque transfer, assembly speed and extends the life of your bits and screws. They are undeniably Eva-Last<sup>®</sup>'s most superior choice when it comes to any long-term or outdoor application as they are built to withstand the worst.



Gravel

Starter clips

Frame screws

HULK screws are available in both high strength stainless steel. Stainless steel clips are passivated with corrosion resistant zinc with colour added. Zinc increases corrosion resistance and prevents galvanic oxidation. It also makes the clip dark so that it is camouflaged between the boards.

- Landscape Fabric Truss clips
  - Truss hangers
  - Hurricane/purlin clips
  - HULK screws



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	FASTENERS		
	SIZE	QTY per pack	QTY p/m
ST	ARTER KIT -5 m 2		
Plastic Clip	N/A 5mm GAP	115	25
Starter Clip	N/A 5mm GAP	10	N/A
HULK Torpedo Screw	M4.2 X 40	125	25
EX	PANSION KIT - 10	M 2	
Plastic Clip	M4.2 X 40	250	25
HULK Torpedo Screw	M4.2 X 40	250	25
	Top Fix Screw		
	M5 x 50	75	50
Color available:			
SAPPHIRE SILVER TIGER COVE	ESPRESSO R	OAST COPF	PER CANYON
PE (0.9	FREE Hu	lk bit included in e	every pack

This guide is specific to SCA and Britain. Expansion and Contraction is reduced, due to cooler climates



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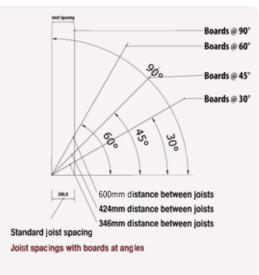
### 4. Joist Spacing

Please consult the cart below to ensure suffient material and proper spacing of subtracture joist for your deck before beginning installation.

### Table 2: Joist spacing

#### MAX STANDARD JOIST SPACING - 300mm

BOARD TYPE	90	30	45	60
Solid	400mm	350mm	280mm	200mm
Fascia	300mm	260mm	220mm	150mm



### 5. Before installation: Tips for planning ahead

The installation of an Eva-Last<sup>®</sup> *Infinity*<sup>™</sup> deck is a big investment and should be viewed as a serious building project. Installation plays a huge role in the longevity and lifetime of your deck and will have a direct influence on performance as well as warranty.

If at any stage of the installation you need advice or assistance, please contact Eva-Last<sup>®</sup>. We are here to help make each and every step of the installation process a success.

#### Important! Please make sure that before you begin construction, you are aware of all building requirements, codes and restrictions.

It is important that you have a solid understanding of the planning and installation process to guarantee that Eva-Last<sup>®</sup> *Infinity*<sup>™</sup> products are assembled correctly. Attention to detail and careful planning are necessary throughout the entire installation process.

Make sure you familiarise yourself with this guide before beginning installation. Warranty claims will be subject to compliance with specifications outlined in this Installation Guide.



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Good time management of your build can ensure you save money and avoid the hassle and stress of a rushed job. If you can, start planning months in advance to avoid any nasty surprises.

When planning a deck, consider it as an extension to the outdoor living area rather than just an outdoor floor. Decks can incorporate comfort, fun and interesting elements. You may want to incorporate a fire pit, barbecue area. Contact Eva-Last<sup>®</sup> if you need some ideas or assistance with this. There are no limits to what is possible.

Combinations of colours, particularly on a border around your deck or on the fascia will highlight and accent your deck. Experiment, explore and try something that will give your space beautiful aesthetic appeal.

Think about adding lighting, either leading to and/or on your deck. Down lights, spotlights, stair lights, anything is possible. Lighting can really add life, looks impressive and can bring a wonderful ambience to your deck.

#### 6. Before installation: Site inspection

Important! Please make sure that before you begin construction, you are aware of all building requirements, codes and restrictions.

Assess your proposed project site and take into account elements such as wind, shade, and seasonal changes. How will these impact your garden space? If you're building a raised deck, will it affect the lighting in your living space should your garden space be uneven. Would it be better to build terraced decking? Will your existing plants need to be removed or will planters be built around them? Will you be planting near any water or electricity lines? Will your deck require a balustrade? These are only a few things to think about that may impact the installation and enjoyment of your deck.

Inspect and assess the ground and/or surface below your project site before installing Eva-Last<sup>®</sup> Infinity<sup>™</sup>. This should be a dry flat area. For uneven surfaces allow for substructure alterations to create an even base for Eva-Last<sup>®</sup> Infinity<sup>™</sup> decking profiles.

#### Pre-installation checklist! (Assessment of the site and area)

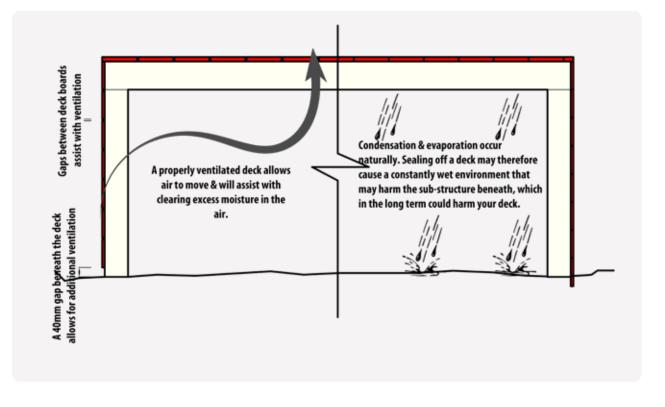
- Ground conditions	- How is the roof pitched?
- Soil type	- Has the ground been compacted? (Consult with engineer)
- Drainage	- Will the ground wash away or subside? (Consult with engineer)
- Flood test/drainage	- Exposure to sunlight
- Water drains	- Plants/trees near the site that may spill sap or residue onto the deck
- Where do all the gutters flow to?	- Local building regulations

#### Ensure the building site allows sufficient deck ventilation and drainage.

Ventilation beneath a deck is important for evaporation and condensation. If water is able to get underneath a deck for any reason it must be able to get out. Composite by nature is a fairly warm material and would promote condensation under a deck if it were air tight. For that reason it is important to leave a (recommended) 40 mm gap beneath fascia boards to allow for proper ventilation from beneath the fascia and out through the gaps in the deck boards. Completely sealing a deck would not only have the potential to cause harm to the substructure by constantly leaving it in a wet environment, but also potentially promote the growth of mould.



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For non-screed surfaces, plan a minimum of 100 mm elevation space between the ground and the bottom of your lowest bearer. For screed surfaces, decking profiles must be elevated a minimum of 30 mm above the ground. This guideline is based on the smallest profile (composite batten) – other profiles may vary.

**NB!** Account for sufficient room for expansion and contraction of Eva-Last<sup>®</sup> *Infinity*<sup>™</sup> boards, as the profiles contain plastic that will expand and contract more so than actual timber. The expansion and contraction of these profiles must be considered when installing. Sufficient expansion gaps must be left at butt joins as well as where the profiles meet fixed objects. The rate of expansion of Eva-Last<sup>®</sup> *Infinity*<sup>™</sup> profiles is calculated at 1.5mm- 2mm per running metre. (See 'Installation:

Expansion & contraction of decking boards').

Note: Eva-Last<sup>®</sup> strongly recommends getting a qualified expert such as a civil engineer or architect to check the site before construction begins, especially on new building sites in order to assess whether the ground has been compacted correctly or not and is suitable for decking or light construction. It should be checked for various elements such as storm water drains etc.

If you have any questions at any stage of your installation, please get in touch with Eva-Last®.



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### 7. Tips: Decking and materials

- Leave a maximum of 25 mm overhang of Eva-Last<sup>®</sup> Infinity<sup>™</sup> profiles from substructure joists.
- Consider temperature at the time of installation. This is important for installation considering contraction and expansion allowance. We recommend placing Eva-Last<sup>®</sup> Infinity<sup>™</sup> profiles on-site at least 72 hours before installation.
- Avoid pre-cutting Eva-Last<sup>®</sup> Infinity<sup>™</sup> boards, as not every construction wall is straight.
- Remember that Eva-Last<sup>®</sup> Infinity<sup>™</sup> material is heavier and more flexible than natural timber. Be sure to take care when transporting, carrying or when working with it.
- Make sure that you have enough boards for your project. Nothing slows a project down more than having to collect more boards.
- Decking last is best.
   If you are in the middle of building, it is best to leave installation of your deck to the end in order to avoid your deck being ruined by painting, welding or general construction
- Manage your site.
   Be sure to take note of your work area, make sure that you can get all your material and equipment onto site.

#### 8. Before installation: Choosing your substructure

Important! Please make sure that before you begin construction, you are aware of all building requirements, codes and restrictions.

There are many ways to build and install substructures and decks. Each and every application needs to be assessed accordingly before beginning any installation. Building codes need to be adhered to and all Eva-Last<sup>®</sup> installation guidelines need to be followed in order for warranties to be valid.

Asses and select the most suitable sub-structure after and based on your site inspection.

### Table 3: Framing solutions

Two main types of framing solutions:



Composite batten



Timber



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### Choosing your substructure

#### **Composite battens**

- Good for use on self-supporting surfaces like tiles, concrete and screeded surfaces.
- High moisture resistance qualities and are perfect for low lying, level surfaces and spaces where you don't have a lot of height to work with.
- They are also well suited to cladding applications due to their highly durable properties.

#### **Treated softwood**

- Made from natural material that requires maintenance.
- It expands and contracts with moisture.
- It has intricate workings.
- If you can't access it, it will dry out.

### 9. Tips: Substructure

- Composite as a substructure Eva-Last<sup>®</sup> products, other than the Eva-Last<sup>®</sup> composite joist for use on self supporting surfaces, are for decking and accessory use only and should not be used as substructure material.
- Consider what is under your deck The footing of the structure will sink if water accumulates on the deck especially, in one centralised area. Remember to check that the soil is compacted correctly and has a gradient/slope so that water can drain away sufficiently.
- Leave a maximum of 25 mm overhang of Eva-Last<sup>®</sup> Infinity<sup>™</sup> profiles from substructure joists

#### 10. Before installation: Choosing your Infinity<sup>™</sup> boards

Decide on which boards to use based on:

- 1. Personal preferences and lifestyle
- 2. Moisture and drainage conditions
- Direct sunlight if your projects site is an area that receives a lot of light, you may want to choose a lighter colour that will absorb less heat

Eva-Last<sup>®</sup> has taken great time and care in perfecting each and every profile design, ensuring that each board performs at its best and works perfectly with all the other building components and fixings.

- Each Eva-Last<sup>®</sup> Infinity<sup>™</sup> profile consists of a mixture of eco-friendly wood and bamboo fibres as well as High-Density-Polyethylene (HDPE)
   plastic, mixed with colourants and high-grade UV stabilisers that give Eva-Last<sup>®</sup> Infinity<sup>™</sup> boards their durability and longevity, able to withstand the harshest climates.
- Each profile is available in various finishes and colours, ensuring you have the best possible choices available for your project.
- Most Eva-Last<sup>®</sup> boards are designed with a hidden clip system. As a result we have created a groove along the side of the board.



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### 11. Before installation: Quantification & ordering of Eva-Last<sup>®</sup> Infinity<sup>™</sup>

#### • Find the area of your proposed deck

By working out the area of your deck, you are able to work out the quantities you will need. NB: This is not always the most accurate method and will require that an appropriate amount of waste be added.

- Keep in mind the standard length of Eva-Last<sup>®</sup> Infinity<sup>™</sup> boards; 4.8 metre. If your build allows, try work to these standard sizes in order to keep costs down and reduce wastage.
- When calculating the amount of Eva-Last<sup>®</sup> Infinity<sup>™</sup> product you require, remember to take wastage into account. 10% wastage is a good average to work with for a square deck, and round/curved decks will have approx 15-20% wastage, however please keep in mind that you will still need to do calculations as this can vary massively depending on the shape and design of your deck.

#### Initial quantification

For the purpose of basic quantification, area formulation is the quickest and simplest method of finding out what you need. This may work for a perfectly square deck; however you may need to seek assistance for more complicated decks and shapes. It often helps to draw out the deck area and break it into shapes.

#### Ordering

When placing orders for Eva-Last<sup>®</sup> *Infinity*<sup>™</sup> boards, the following information is required to make certain that you receive exactly what you need:

- Quantities and lengths
- The profile you require
- The finish you require
- The colour you would like
- What substructure you will be using (steel/pine)
- Will you require delivery or will you collect.

If you are unsure of the quantities needed or unsure of which boards are most appropriate for your application or if you have architectural plans that you'd like assistance with, Eva-Last® is available to assist.

### 12. Before installation: Transporting Eva-Last<sup>®</sup> Infinity<sup>™</sup> deck boards

- It is highly advisable that any collection of Eva-Last<sup>®</sup> *Infinity*<sup>™</sup> boards be done in a vehicle long enough to hold the boards without bending them, in order to avoid the boards becoming damaged during transportation.
- Boards must be secured properly before transportation.

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#### Logistics:

Deck boards are quite heavy and are sold in lengths that a standard passenger vehicle will not be able to carry. It is important to take this into account when considering logistics and accessibility to site. Make certain you have a vehicle large enough to bare the weight and length of boards.

#### Handling and Storage:

When storing on site, try not to store the boards directly on the ground, use a ground sheet if you have no option. A better way to store boards, would be on top of pallets. And try to cover the top of the stack of boards.

This will make cleaning boards after construction easier, and will protect all the boards from the elements during long term storage, ensuring that all boards have an equal amount of exposure when they are laid.

Always pack boards securely. Do not over-stack to the point where they may topple over. If there is no choice and storage space is limited. Straps should be used. (Ensure that the blocks on the straps do not scratch against the boards and their corners, by placing them on-top of a cloth, block or piece of cardboard.

#### **On-site**

- Place Eva-Last<sup>®</sup> Infinity<sup>™</sup> deck boards on-site 72 hours before installation to allow acclimatisation to the environment.
- Once the boards have reached the building site, ensure that they are stored on level ground. It is recommended that the boards not be stored directly on the ground and are covered.
- If the boards need to be stored for long periods, pack the boards on top of pallets.

#### 13. Preparation: Designing your deck

#### Important! Please make sure that before you begin construction, you are aware of all building requirements, codes and restrictions.

- Begin with the location of your deck and decide whether it will be a free standing deck, in between structures, joining 2 structures or if it is adjoined to an existing structure (fixed deck).
- Think about how the deck will be accessed. Will it be accessed through a doorway or is there a path leading you to the deck? Wherever you plan to build the deck, make sure it's easily accessible.
- With clear access to the deck, consider how you can use the natural landscape to add interest and function to your design.
- When you have a general idea of where you will build the deck, you will then need to determine the size and function. If you enjoy entertaining a lot, a larger deck may be suitable to fit chairs, tables, a barbeque and other outdoor furniture.
- Think about the style best suited to the project and your lifestyle.

If you have doors or windows that swing outward, make sure they will clear the railing. Remember to avoid a layout that places a railing in the middle of a window.



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### 14. Preparation: Deck layouts & plans

#### Important! Please make sure that before you begin construction, you are aware of all building requirements, codes and restrictions.

This installation guide describes the processes involved in building a square, single level deck. Please bear in mind that other decks may require different calculations and techniques. Please do not hesitate to contact Eva-Last<sup>®</sup> should you need any technical assistance at any stage of your build.

- No application is ever the same. Develop your plan based on the most suitable application and deck boards used for the job and according to the specific conditions.
- Before you begin your layout, make sure you are clear of any utility lines, and irrigation.
- Place your marker boards beyond the corners of your deck area.
- If there is no room for a marker board, use a single stake and drive a nail into the top. Tie string to the marker boards, marking the outside edges of your deck plan.
- Tie the string to a nail. (Spray paint is a good alternative to string and also works well.)
- Check that the string is level and square.
- Take measurements of the site and make sure you triangulate from corner to corner. (Measure the diagonals of the layout.) You will layout a square when the diagonals are equal. Make any adjustments and attach the strings in their final positions with screws.

To mark the holes for the foundation posts, determine the foundation spacing. This spacing depends on:

- 1. The size of your beams
- 2. Local building codes and
- 3. The design of your deck
- Use another set of strings to line up the posts. Once you know the spacing, measure in from the side strings and use a
  plumb bob to mark the holes.
- Place a stake at each spot or spray paint the position.
- If the deck is fixed, you need to mark the height of the beams along the building as a reference. First, determine where the
  deck will sit in relation to the door. It should be below the threshold to keep the water from entering.
- Measure down the thickness of the decking combined with the height of the joists. This will give you the height of the top of the bearer beams. Then mark a level line along this point on the building.



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### 15. Preparation: Setting the deck poles

#### Important! Please make sure that before you begin construction, you are aware of all building requirements, codes and restrictions.

- Before constructing the frame/setting the poles, look at your drawing and plan the whole deck with your laying pattern. Remember the double joist if your boards join end to end.
- There are various methods for constructing footings. We recommend the footing (concrete) and post (pole) combination.

TIMBER POLES
Cheaper
Burn resistance is pretty much non existent compared to steel
Insect problems such as termites (without treatment)
Rotting due to damp (without treatment)
Treatments used are usually poisonous, making it hazardous to burn
Warps as it dries out
Not as precise as steel
Wood tends to dry out over time, causing bolts and nuts to shift
Not nearly as strong as steel

### Table 5: Timber poles vs steel poles

- Using an auger, spade or pick to dig a deep narrow hole.
- Make sure you get to solid ground, if the ground is soft, your footing size will need to increase. If the ground is hard rock, you will not need to go as big with footing. You will need to calculate this based on the conditions for load bearing and codes. (For hard ground 400 mm x 400 mm x 400 mm OR 400 mm x 400 mm x a third of the height of the post)
- Once you get to the required depth, move onto the next hole. When all the holes have been dug, check that they are all correct according to the local building code.
- Remove any grass and roll out the landscaping fabric over the site. The landscaping fabric holds the soil, allows water to flow through and prevents grass and weeds growing through the deck.
- Cut openings for the poles.



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#### Set the poles - there are two options for doing this!

#### Option 1

- Pour concrete into the hole.
- Check that the concrete is level.
- When the concrete is set, place the pole on the footing. Plant the smallest side of the pole into the ground at the bottom.
- Use the layout strings to keep the posts in line. You can attach temporary braces if needed.
- Check that it is plumb with a level.
- Fill the hole with gravel/concrete mix.

#### **Option 2**

- Place the pole in the hole.
- Secure it with nails so that it grips onto the concrete.
- Check that it is plumb with a level.
- Use the layout strings to keep the posts in line. You can attach temporary braces if needed.
- Fill the hole with concrete mix.
- Slope concrete away from pole

Make sure the poles reach the required height once they are set in the ground.

#### Once all the posts are set, cover the bidim with gravel.

Leave the concrete to set for at least 24 hours to ensure that the footings are solid and strong, taking the moisture content of the air and soil into consideration.

#### 16. Preparation: Framing your deck

- 1. 90% of the deck is the frame. If the frame is installed correctly, everything else should fall into place. If the poles are set, the next step is to attach the bearer beams that will support the decking. You will need to use carriage bolts through the beams and poles.
- 2. From the chalk line, measure down the width of the beam to make a mark where the cross beams will attach. Its best to mark from a centre tto centre posistion.
- 3. Check with level.
- 4. Cut your beams to length. If they have a slight arc (crown), make sure the crown is always facing up (for pine) and place them on the cleats. Use a clamp if you need to then drill the bolt holes. Insert the bolts, washer tighten.
- 5. If the structure is adjoined to an existing structure (fixed) install truss hangers with coach screws/chemical anchors/shield anchor against structure to support bearers level with line on the building.
- 6. Place truss hangers in place and screw bearers to truss hangers with timber screws (pine).
- 7. Cut the poles to the top of the bearer beam.
- 8. Check the spacing of the joists and that they are correct. (Please refer to Table 2: Joist Spacing)
- 9. Starting at the beginning of a bearer (parallel or square line), roll out your tape measure and mark the required joist spacing on top of the two end bearers.
- 10. Once you have all your marks, extend the lines down the face of the planks using a combination square. Place an X to the right of this line, indicating that the joist will sit to the right.



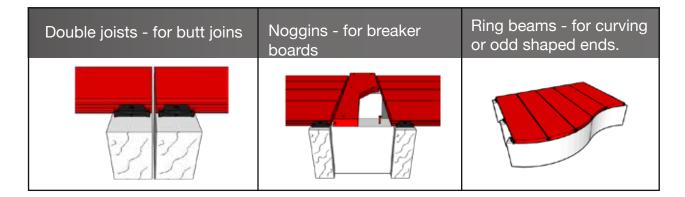
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# Note: When laying the surface, different patterns require different joist spacings. (Please refer to Table 2: Joist Spacing)

- Now you can attach the joists. First cut the joists to length. Always apply a sealer to the cut ends and edges for pine.
- Attach the joists to the bearers with hurricane clips, fix with timber screws (pine)
- Now attach the rim joist against the end joist and attach them with timber frame screws (pine). For steel, use corner truss
  clips with Tek screws to attach the rim joist with the end joist.
- The frame should now be locked in place.

#### 17. Preparation: Double Joists on butt joins

- Owing to the expansion and contraction of boards it is important to ensure that the boards are properly supported on both ends. A butt join is where two boards meet end to end, as they 'butt' up against one another. Where the two ends of the profiles meet in a butt join, it should be met with a double joist. Double joisting with double clips with gaps in between joists allows water and dirt to run away and not into the cavity of the profiles if it is hollow.
- All butt joins must sit on a doubled up support joist for either timber/steel joist or composite batten. Installation of a hidden clip should be added for both, and an appropriate gap must be provided dependant on the length of the board (see 19. Installation: Expansion & contraction of decking boards). It is recommended that the double joist itself have a 20 mm gap between it to allow for drainage.
- Eva-Last<sup>®</sup> also recommends that a top fixing screw be used to hold the board in place to prevent it from moving, as it may
  damage the board as it moves.
- Double joists should be used not only for decking but also where screens are built and boards meet.



### 18. Installation: Expansion & contraction of decking boards

Composite, just like timber, expands and contracts, though for different reasons. Timber expands and contracts due to water absorption, in direct proportion to the increase and decrease of moisture in the air. Bamboo-plastic composite moves directly as a result of thermo-expansion, or temperature related expansion.

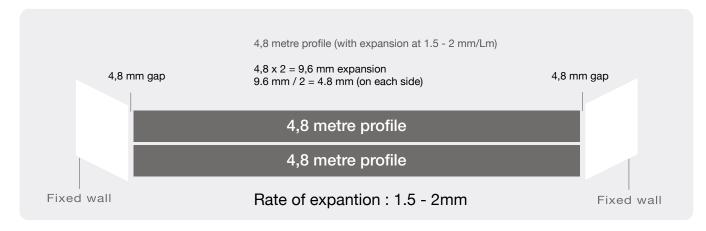
The expansion and contraction of Eva-Last<sup>®</sup> *Infinity*<sup>™</sup> boards must be accounted for when planning installation. Sufficient expansion gaps must be left at butt joins as well as where the profiles meet fixed objects.





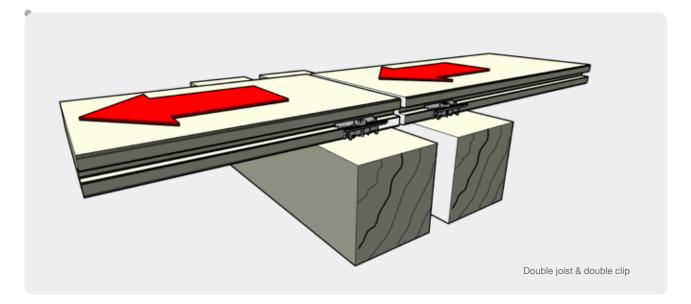
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### **Table 6: Expansion**



#### Important! All butt joints must have a double joist.

Install a second support joist as shown for proper attachment of the hidden clip.



- Once the support joist is in place, the clips can be secured next to one another.
- Eva-Last<sup>®</sup> decking clips fit easily, do not force them into Eva-Last<sup>®</sup> Infinity<sup>™</sup> plank grooves they need to be able to expand and contract.
- Use a clip and screw on every joist. Boards must not ever share clips or joist!
- Screw clip into joist, taking care that the screw goes down straight and into the centre of the joist. Screws must go in at 90 degrees so as not to damage the next board coming it.
- Remember to leave a maximum of 25 mm overhang of Eva-Last<sup>®</sup> Infinity<sup>™</sup> profiles from substructure joists.



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Important! Always make sure you are working with the correct joist spacing for your profile. Please refer to 'Table 2: Joist spacing' for the correct spacing for your profile and application.

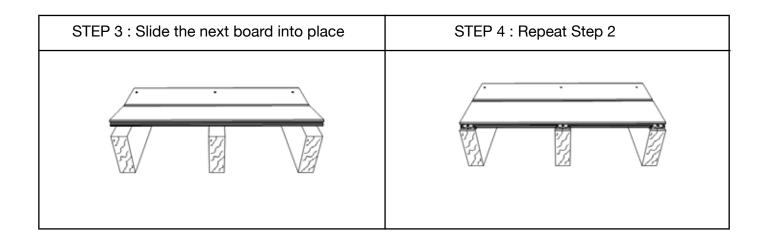
#### Tips: Deck build & detail

- Always use sharp blades.
- Check your mitre saw, against a steel square at the beginning of each day.
- If you are working between set lines, check that they are parallel. This will help with wastage and help disguise lines that are not straight.
- Use a one or two board perimeter around a deck and then lay the boards perpendicularly inside. Make sure there is an area for water and leaves to fall through.
- Think about giving a deck an overhang, rather than a trim.
- Always crossover. Use the length of the profiles in the direction of the shorter side of the deck.
- Build in boxes. Building a border of two profiles around each profile length area will prevent profiles impacting each other head to toe and will control expansion.
- If you want to keep your gaps perfectly in line, use the Eva-Last<sup>®</sup> locking clip where you are making your joins.
   Top fix a single screw through the centre of each profile. This way thermal expansion will be equal in all directions and profiles will not move over time.

STEP 1: Fasten the f	irst board to secure:
Starter Clip OR	Composite Deck Screw
Insert Starter clip between wall and board Insert HULK Clip Screw (May need to go in at an angle.	Top Fix 25mm from the edge of the board
STEP 2 : Use the plastic hidden faster	er and screw and fasten the board in



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#### 19. Installation: Laying the deck

#### Important! Please make sure that before you begin construction, you are aware of all building requirements, codes and restrictions.

#### If you have any questions or uncertainties, please contact Eva-Last® before beginning your installation.

- Always wear safety equipment. Make sure you pre-drill holes and ensure all screws are secure but not over tightened during installation. This will help prevent pressure cracks.
- Place Eva-Last<sup>®</sup> Infinity<sup>TM</sup> profiles on the decking site 72 hours before installation to allow acclimation to environment.
- Avoid pre-cutting Eva-Last<sup>®</sup> Infinity<sup>™</sup> planks, as not every construction wall is straight.
- Pre drill holes in boards slightly bigger than the screw.
- There should always be gaps in the installation for drainage, ventilation, air flow, and organic matter to move through.
- The more ventilation provided underneath the deck, the better. Don't close the sides and make sure there is air to move in all directions. This also allows moisture to evaporate, ensuring your deck has the longest life possible.
- The first board is key in the laying process! If it is a fixed deck, place the first plank flush with the rim joist make sure it is square or parallel with existing structure or with your frame. Make sure your starting profile is laid perfectly straight, as all subsequent planks will follow its line. Make sure by measuring edges and diagonals.



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- Top fix the board to the rim joist with the preferred overhang. Depending on the design, you can have bigger overhang, but remember you cannot ever overhang by more than 50 mm. Aesthetically, it often looks better when you overhang about 10 mm-15 mm over the fascia.
- A starting clip can be used when you end flush with the pine and there is no overhang.
- Fixing your first profile can be done in 2 ways:
  - 1. Using starter clips recommended when installing profiles 3 m and longer, as this will allow the boards to slide freely when expanding & contracting. (No overhang)
  - 2. Top fixing with HULK composite decking screw profiles 3 m long or less, for expansion & contraction reasons. (With overhang)
- Lay planks perpendicular to joists or at preferred angle. Attach subsequent profiles to joists with decking Halo clip.
   Pre-load clips with HULK screw. Plastic clip over joist and tighten to 75% to hold the boards in place. Move the next profile into position then sufficiently tighten clips. Do not over tighten as this may deform the clip. Continue to next board.
- If you are pre-loading clips, try to have someone assist you in placing the clips in position on each board. Install a clip on every joist and fasten with HULK screw. You cannot miss one!
- Push the next board into place, do not force or push too hard. The clips will keep a gap naturally if installed correctly. If you over tighten, the clip will deform and increase the gap. When fastening with a screw, don't over tighten either.
- It is always a good idea to use a cordless drill with a clutch. Set the clutch relatively light to ensure you don't over tighten.
- Fix last/end profile with the starter profile or top fix. Please remember to always pre-drill holes and counter sink to avoid cracking.
- Top fixing screws should be no closer than 30 mm from the edge of the profile.

#### Joists

- Rim joists Mark spacing and lay out your joists with rim joist in mind. For complex designs you may need to curve the rim joist.
- You will always need perimeter joists (rim joists) for fastening the fascias.
- Always remember to leave 25mm gaps between double joists.

#### **Tips: Fascias**

- Eva-Last<sup>®</sup> Infinity<sup>™</sup> fascia boards should be screwed to the frame (end joist or rim joist) and not to the decking boards.
- Use two screws fixed rigidly every 300 mm along the profile, and no more than 40 mm from the start/finish edge.
- Allow a ventilation gap of 40 mm between the bottom of the fascia board and the ground.
- Be cautious with fascias, especially with high decks sometimes rather use frames with a weave.
- Fascias should sit underneath the deck boards.
- Depending on the application, think about rather using overhang vs. fascias or trims.



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### 20. Installing deck boards as stairs

It is very common for decks to incorporate steps or even flights of stairs. Depending on the look you are trying to achieve, it is also quite common to continue your stairs in the same material as the deck. As a result, a combination of our fascia boards and deck boards are often used.

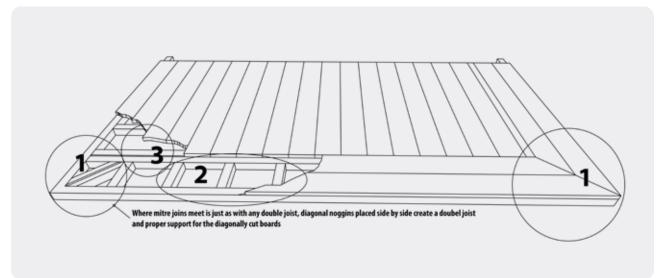
The tread of the board is usually 2 x the height of the riser and we design most of our stairs with this in mind, where we place 2 boards as the tread and 1 fascia board as the riser.

### 21. Installing deck boards at an angle

Eva-Last<sup>®</sup> has a particular recommendation for every board's joist spacing. Please see 'Table 2: Joist spacing'. This is recommended with the understanding that Eva-Last<sup>®</sup> *Infinity*<sup>™</sup> boards will be installed perpendicular to the joists.

When installing the boards at an angle the joist spacing needs to shift to accommodate this as the lengths differ quite substantially from the normal 90° angle.

The larger the degree, the larger the gap between the joists becomes. The solution to this is simple however. Reduce the gap in the joists so that the boards are properly supported.



### 22. After installation

- Do not burn the left over composite material, dispose of it correctly.
- You should not let mulch build up on your deck.
- Please familiarise yourself with the Eva-Last<sup>®</sup> Infinity<sup>™</sup> Cleaning & Care Guide for further care instructions.

#### Important! Do not sand Eva-Last® Infinity™ boards.

You may want to think about adding furniture and/or planter boxes to help complete the look of your deck and add the finishing touches. This can greatly improve the aesthetic appeal and comfort of the space. You could even build your own with the off cuts from the deck.



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### 23. Don'ts

- Do not span over a bearers loading capacity when building a deck, it is unsafe.
- Do not rush a job.
- Do not use inferior products.
- Do not trap moisture.
- Do not ever use cracked boards.
- Do not sand Eva-Last<sup>®</sup> Infinity<sup>™</sup> boards.

For a long lasting deck and one that conforms to all warranty specifications, please read and familiarise yourself with the Eva-Last<sup>®</sup> Cleaning & Care Guide, available for download at www.eva-last.com



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### **DRAWINGS:**

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